

Chapter 113 - FLOOD DAMAGE PREVENTION

Section. 113-1. - Definitions.

In construing the provisions of this chapter, where the context will permit and no definition is provided herein, the definitions provided in F.S. ch. 403, as may be amended from time to time, and in the rules and regulations promulgated thereunder, as may be amended from time to time, shall apply. The following words and phrases when used in this chapter shall have the meanings ascribed to them in this section.

Accessory structure means structures that represent a minimal investment and that are subordinate to and accessory to the primary structure or use on the property (e.g., storage buildings, detached garages, and gazebos) may be exempted from the elevation requirement of Section 113-7(b)(2), provided the following criteria are met:

- (1) The structure is not used for human habitation, including occupancy as a work place for extended periods of time;
- (2) The structure is designed and constructed so as to have a low potential for damage during a flood (e.g., using flood resistant materials as provided in FEMA Technical Bulletin #88-2, and any subsequent revisions thereto);
- (3) The structure shall be located on the building site so as to offer the minimum resistance to the flow of floodwater (e.g., parallel to a canal, perpendicular to the bay);
- (4) The structure is firmly anchored to prevent flotation, per Section 113-7(a)(1);
- (5) All electrical service, heating/cooling equipment, and other mechanical or electrical equipment is either elevated above the elevation required by Section 113-7(b)(1), or is floodproofed. One switch and outlet connected to a ground fault interrupt breaker may be installed below the base flood elevation, and all construction below that elevation shall be of flood-resistant materials.

Addition (to an existing building) means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a firewall. The term "addition (to an existing building) means any walled and roofed addition which is connected by a firewall or is separated by independent perimeter load-bearing walls in new construction.

Alteration of a watercourse means a dam impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area of the channel or the channel capacity, or any other form of modification which may alter, impede, retard or change the direction and/or velocity of the riverine flow of water during conditions of the base flood.

Appeal means a request for a review of the Floodplain Administrator's interpretation of any provision of this chapter.

Area of special flood hazard means the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.

ASCE means American Society of Civil Engineers

ASCE 24 is a standard titled *Flood Resistant Design and Construction* that is referenced by the *Florida Building Code*. ASCE 24 is developed and published by the American Society of Civil Engineers, Reston, VA.

Base flood elevation means the elevation for which there is a one percent chance in any given year that flood levels will equal or exceed it including wave height, relative to the National Geodetic Vertical Datum (NGVD), North American Vertical Datum (NAVD) or other datum accepted by the City. The base flood elevations are indicated on the city's flood insurance rate maps (FIRMs).

Base flood means a flood having a one percent chance of being equaled or exceeded in any given year. [Also defined in FBC, B, Section 202.] The base flood is commonly referred to as the "100-year flood" or the "1-percent-annual chance flood."

Basement means that portion of a building having its floor subgrade (belowground level) on all sides.

Below grade facilities means off-street parking facilities constructed underground and other similar types of below grade areas within a building which are not habitable areas and do not contain electrical nor mechanical equipment.

Breakaway walls mean any type of wall, whether solid or lattice, and whether constructed of concrete, masonry, wood, metal plastic, or any other suitable building material, which is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system or any other building to which they might be carried by floodwaters. The design of a breakaway wall must be certified by a registered structural engineer to meet the following conditions:

- (1) A breakaway wall shall collapse from lateral pressure created by water loads less than those which would occur during the base flood, but must withstand wind forces as set by the Florida Building Code.
- (2) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Water loading values shall be associated with the base flood.

Building means any structure built for support, shelter or enclosure for any occupancy or storage.

Coastal construction control line means the line established by the State of Florida pursuant to section 161.053, F.S., and recorded in the official records of the community, which defines that portion of the beach-dune system subject to severe fluctuations based on a 100-year storm surge, storm waves or other predictable weather conditions.

Coastal high hazard area means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources caused by, but not limited to, hurricane and tidal storm surge and wave wash. The coastal high hazard areas are also referred to as "high hazard areas subject to high velocity wave action" or "V Zones" and are designated on a FIRM as Zone V1-30, VE or V.

Compensatory storage means the volume of storage provided onsite to compensate for fill volume placed onsite so that there is equal 100-year floodplain storage in the post-development or redevelopment condition as in the pre-development (pre-project) condition.

County flood criteria maps mean those official maps of the county showing the required minimum finished grade elevation of the ground surface within a development site, said maps as adopted by the board of county commissioners and recorded in Plat Book 120 at pages 13-1, 13-2, 13-3, 13-4 and 13-5 of the public records of the county or as the same may be modified from time to time.

Crown of road (centerline) means a line running parallel with the street right-of-way which is half the distance between the extreme edges of the official right-of-way width as shown on a map approved by the public works department.

Design Flood means the flood associated with the greater of the following two areas: [Also defined in FBC, B, Section 202.]

- (1) Area with a floodplain subject to a 1-percent or greater chance of flooding in any year; or
- (2) Area designated as a flood hazard area on the community's flood hazard map, or otherwise legally designated.

Design flood elevation means the elevation of the "design flood," including wave height, relative to the datum specified on the community's legally designated flood hazard map. In areas designated as Zone AO, the design flood elevation shall be the elevation of the highest existing grade of the building's perimeter plus the depth number (in feet) specified on the flood hazard map. In areas designated as

Zone AO where the depth number is not specified on the map, the depth number shall be taken as being equal to 2 feet. [Also defined in FBC, B, Section 202.]

Development or development activity means any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or permanent storage of materials or equipment.

Development permit means any building permit, zoning permit, subdivision approval, rezoning, recertification, special use, variance or any other official action of the city having the effect of permitting the development of land.

Elevated building means a nonbasement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation, perimeter walls, pilings, columns (posts and piers) or shear walls.

Encroachment means the placement of fill, excavation, buildings, permanent structures or other development into a flood hazard area which may impede or alter the flow capacity of riverine flood hazard areas.

Existing construction means for the purposes of determining flood insurance rates, structures for which the "start of construction" commenced before June 18, 1974. The term "existing construction" may also be referred to as "existing structures."

Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before June 18, 1974.

Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

FAC means Florida Administrative Code

FDEM means the Florida Department of Emergency Management.

FDEP means the Florida Department of Environmental Protection.

Federal Emergency Management Agency (FEMA) means the federal agency that, in addition to carrying out other functions, administers the National Flood Insurance Program

Flood or flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) The overflow of streams, rivers, or other inland water;
- (2) Abnormally high tidal water or rising coastal waters resulting from severe storms, hurricanes or tsunamis; or
- (3) The unusual and rapid accumulation of runoff of surface water from any source.

Flood damage-resistant materials means any construction material capable of withstanding direct and prolonged contact with floodwaters without sustaining any damage that requires more than cosmetic repair. [Also defined in FBC, B, Section 202.]

Flood hazard area means the greater of the following two areas: [Also defined in FBC, B, Section 202.]

- (1) The area within a floodplain subject to a 1-percent or greater chance of flooding in any year.
- (2) The area designated as a flood hazard area on the community's flood hazard map, or otherwise legally designated.

Flood hazard boundary map means an official map of the city, issued prior to the FIRM by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been identified.

Flood insurance rate map (FIRM) means an official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

Flood insurance study means the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, as well as the water surface elevation of the base flood.

Floodplain or flood-prone area means any land area susceptible to being inundated by water from any source.

Floodplain Administrator means the office or position designated and charged with the administration and enforcement of this ordinance chapter (may be referred to as the Floodplain Manager). [MFS1]

Floodplain development permit or approval means an official document or certificate issued by the community, or other evidence of approval or concurrence, which authorizes performance of specific development activities that are located in flood hazard areas and that are determined to be compliant with this chapter.

Floodproofing means any combination of structural and nonstructural additions, changes, or adjustments (other than elevating) to a structure which reduces or eliminates flood damage to real estate or improved real property, water supply and sanitary sewage facilities, structures, and their contents. Structural floodproofing as an alternative to elevating is only allowed for nonresidential buildings. The term "floodproofing" includes by way of illustration, not limitation, the following measures:

- (1) Anchorage to resist flotation and lateral movement.
- (2) Installation of watertight doors, bulkheads, and shutters, or similar methods of construction to protect against winds, wave action, or floodwaters.
- (3) Reinforcement of walls to resist water pressures.
- (4) Use of paints, membranes, or mortars to reduce seepage of water through walls.
- (5) Addition of mass or weight to structures to resist flotation.
- (6) Installation of pumps to lower water levels in structures.
- (7) Construction of water supply and wastewater treatment and disposal systems to prevent the entrance or infiltration of floodwaters.
- (8) Pumping facilities or comparable practices for subsurface drainage systems for buildings to relieve external foundation wall and basement flood pressures.
- (9) Construction to resist rupture or collapse caused by water pressure or flooding debris.
- (10) Installation of valves or controls of sanitary and storm drains which will permit the drains to be closed to prevent backup of sewage and stormwaters into the buildings or structures. Gravity draining of basements may be eliminated by mechanical devices.
- (11) Locate all electrical equipment, circuits and installed electrical appliances in a manner which will ensure they are not subject to flooding and to provide protection from inundation by the base flood.
- (12) Locate any structure, storage facilities for chemicals, explosives, buoyant materials, flammable liquids or other toxic materials which could be hazardous to the public health, safety, and welfare in a manner which will ensure that the facilities are situated at elevations above the height associated with the regulatory protection elevation or are adequately floodproofed to prevent flotation of storage containers, or damage to storage containers which could result in the escape of toxic materials into floodwaters.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. [MFS2]

Floodway encroachment analysis means an engineering analysis of the impact that a proposed encroachment into a floodway is expected to have on the floodway boundaries and base flood elevations; the evaluation shall be prepared by a qualified Florida licensed engineer using standard engineering methods and models.

Floor means the top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term "floor" does not include the floor of a garage used solely for parking vehicles.

Florida Building Code (FBC) means the family of codes adopted by the Florida Building Commission, including: Florida Building Code, Building; Florida Building Code, Residential; Florida Building Code, Existing Building; Florida Building Code, Mechanical; Florida Building Code, Plumbing; Florida Building Code, Fuel Gas.

Functionally dependent structure means a structure which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities. The term "functionally dependent structure" does not include long-term storage, manufacture, sales or service facilities.

Highest adjacent grade means the highest natural finished grade elevation of the ground surface, prior to construction, next to the proposed walls of a structure.

Historic building or structure means any structure that is:

- (1) Listed either individually, or as a "contributing" structure within an historic district, in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined eligible for listing by the keeper of the National Register of Historic Places; or
- (2) Listed either individually, or as a "contributing" structure within an historic district in the city register of historic places, (a list maintained by the historic preservation division, upon action by the city commission); or preliminarily determined eligible for listing by the historic preservation board of the city.

Letter of Map Change (LOMC). An official determination issued by FEMA that amends or revises an effective Flood Insurance Rate Map or Flood Insurance Study. Letters of Map Change include:

Letter of Map Amendment (LOMA): An amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property, portion of a property, or structure is not located in a special flood hazard area.

Letter of Map Revision (LOMR): A revision based on technical data that may show changes to flood zones, flood elevations, special flood hazard area boundaries and floodway delineations, and other planimetric features.

Letter of Map Revision Based on Fill (LOMR-F): A determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer located within the special flood hazard area. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.

Conditional Letter of Map Revision (CLOMR): A formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map or Flood Insurance Study; upon submission and

approval of certified as-built documentation, a Letter of Map Revision may be issued by FEMA to revise the effective FIRM.

Light-duty truck as defined in 40 C.F.R. 86.082-2, means any motor vehicle rated at 8,500 pounds Gross Vehicular Weight Rating or less which has a vehicular curb weight of 6,000 pounds or less and which has a basic vehicle frontal area of 45 square feet or less, which is:

- (1) Designed primarily for purposes of transportation of property or is a derivation of such a vehicle,
or
- (2) Designed primarily for transportation of persons and has a capacity of more than 12 persons; or
- (3) Available with special features enabling off-street or off-highway operation and use.

Lowest floor means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this chapter.

Mangrove stand means an assemblage of mangrove trees which consist of one or more of the following species: black mangrove (*Avicennia Germinans*); red mangrove (*Rhizophora Mangle*); white mangrove (*Languncularian Racemosa*) and buttonwood (*Conocarpus Erecta*).

Manufactured home means a structure, transportable in one or more sections, which is eight (8) feet or more in width and greater than four hundred (400) square feet, and which is built on a permanent, integral chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle" or "park trailer." [Also defined in 15C-1.0101, F.A.C.]

Manufactured home, park or subdivision means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Market value means the price at which a property will change hands between a willing buyer and a willing seller, neither party being under compulsion to buy or sell and both having reasonable knowledge of relevant facts. As used in this chapter, the term refers to the market value of buildings and structures, excluding the land and other improvements on the parcel. Market value may be established by a qualified independent appraiser, Actual Cash Value (replacement cost depreciated for age and quality of construction), or tax assessment value adjusted to approximate market value by a factor provided by the Property Appraiser.

Mean sea level means average height of the sea for all stages of the tide. The term "mean sea level" is used as a reference for establishing various elevations within the floodplain for purposes of this chapter, the term "mean sea level" is synonymous with National Geodetic Vertical Datum (NGVD) (as corrected in 1929), which means a vertical control used as a reference for establishing varying elevations within a floodplain.

Minimum finished grade means the elevation established in the county flood criteria maps, at a specific development site, or the crown of an existing adjacent road, whichever is higher.

National Geodetic Vertical Datum (NGVD) (as corrected in 1929) means a vertical control used as a reference for establishing varying elevations with the floodplain.

New construction means any structure for which the start of construction commenced on or after the June 18, 1974, the effective date of the first county flood damage prevention ordinance chapter. The term "new construction" also includes any subsequent improvements to the structure. Start of construction (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. 97-348)), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a building on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the

stage of excavation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory structures, such as garages or gazebos not occupied as dwelling units or not part of the main building. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

New manufactured home, park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after June 18, 1974.

Park trailer means a transportable unit which has a body width not exceeding fourteen (14) feet and which is built on a single chassis and is designed to provide seasonal or temporary living quarters when connected to utilities necessary for operation of installed fixtures and appliances. [Defined in section 320.01, F.S.]

Recreational vehicle means a vehicle, including a park trailer, which is: [See section 320.01, F.S.)

(1) Built on a single chassis;

(2) Four hundred (400) square feet or less when measured at the largest horizontal projection;

(3) Designed to be self-propelled or permanently towable by a light-duty truck; and

(4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Regulatory flood (also herein referred to as the 100-year flood) means the level of flooding that, on the average, is likely to be equaled or exceeded in any 100-year period (i.e., that has a one percent chance of occurring in any year).

Residential or *residence* means any lot, plot, parcel, tract, area, piece of land or building used exclusively for family dwelling purposes or intended to be so used, including concomitant uses as specified in the prevailing land development regulations of the city.

RER means the Miami-Dade County Regulatory and Economic Resources Department.

Routine maintenance means an improvement required to replace a portion of a structure that has deteriorated beyond its practical usefulness, must be in-kind and must not add substantially to the overall value of the structure. Routine maintenance shall also include those improvement projects which are not substantial in nature and which are excepted from the definition in section 113-5.

Sand dunes means naturally occurring accumulations of sand in ridges or mounds landward of the beach.

Sea level rise means the increase in eustatic sea levels compared to existing conditions as defined by the United States Army Corps of Engineers (USACE) or agency as approved by the City.

SFWMD means the South Florida Water Management District.

Special flood hazard area means an area in the floodplain subject to a 1 percent or greater chance of flooding in any given year. Special flood hazard areas are shown on FIRMs as Zone A, AO, A1-A30, AE, A99, AH, V1-V30, VE or V. [Also defined in FBC, B Section 202.]

Start of construction means the date of issuance of permits for new construction and substantial improvements, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement is within 180 days of the date of the issuance. The actual start of construction means either the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of slab or footings, the installation of piles, or the construction of columns.

Permanent construction does not include land preparation (such as clearing, grading, or filling), the installation of streets or walkways, excavation for a basement, footings, piers, or foundations, the erection of temporary forms or the installation of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main buildings. For a substantial improvement, the actual "start of construction" means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building. [Also defined in FBC, B Section 202.]

Structure means a walled and roofed building that is principally aboveground, a gas or liquid storage tank, or other manmade facilities or infrastructures.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial improvement means any combination of additions, rehabilitation, reconstruction, alteration, or other improvements to a structure, taking place during a six-month period in the "A" zones and a five-year period in the "V" zones, in which the cumulative cost equals or exceeds 50 percent of the market value of the structure. The market value of the structure shall be the appraised value of the structure prior to the start of the initial work. The term "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. This term includes structures which incur substantial damage regardless of actual work performed. The term "substantial improvement" does not include either:

- (1) Any project for improvement of a structure required to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to ensure safe living conditions;
- (2) Any alteration of an historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure for which a variance has been granted pursuant to this chapter; or
- (3) Repairs for damage from any origin which are determined to be less than substantial damage.

USACE or Corps means the United States Army Corps of Engineers.

Variance means a grant of relief from the requirements of this chapter or the flood resistant construction requirements of the Florida Building Code, which permits construction in a manner otherwise prohibited by this chapter or the Florida Building Code where specific enforcement would result in unnecessary hardship.

Violation means the failure of a structure or other development to be fully compliant with the provisions of this chapter.

Watercourse means a river, creek, stream, channel or other topographic feature in, on, through, or over which water flows at least periodically.

(Code 1991, § 7.7-24; Code 2006, § 113-4; Ord. No. 3026, § 4, 5-11-1993)

Sec. 113-2. - Statutory authority and legislative findings.

- (a) The state legislature has, in F.S. chs. 163 and 166, granted the authority and responsibility to local governmental units, including the city, the power to adopt regulations designed to promote the public health, safety and general welfare, as well as to adopt development regulations controlling the use of land.
- (b) The flood hazard areas of the city are subject to periodic inundation that results in loss of life and property, health and safety hazards, disruption of commerce and governmental services,

extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

- (c) These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, floodproofed, or otherwise unprotected from flood damages.

(Code 1991, § 7.7-21; Code 2006, § 113-1; Ord. No. 3026, § 1, 5-11-1993)

Sec. 113-3. - Intent and purpose.

It is the purpose of this chapter and the flood load and flood resistant construction requirements of the Florida Building Code to establish minimum requirements to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- (1) Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- (2) Require that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction or substantial improvement;
- (3) Control the alteration of natural floodplains, watercourses, stream channels, shorelines, and natural protective barriers which are involved in the accommodation of floodwaters, to minimize the impact of development on the natural and beneficial functions of the floodplain;
- (4) Control filling, grading, dredging, mining, paving, excavation, drilling operations, storage of equipment or materials and other development which may increase erosion potential or flood damage; and
- (5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands;
- (6) Minimize unnecessary disruption of commerce, access and public service during times of flooding; and
- (7) Require the use of appropriate construction practices in order to prevent or minimize future flood damage.

(Code 1991, § 7.7-22; Code 2006, § 113-2; Ord. No. 3026, § 2, 5-11-1993)

Sec. 113-4. - Objectives.

The objectives of this chapter are to:

- (1) Protect human life and health;
- (2) Minimize the need for future expenditure of public money for costly flood control projects and response to and recovery from flood events;
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) Minimize prolonged business interruptions;
- (5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, street and bridges located in floodplains;

- (6) Help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas;
- (7) Ensure that potential home buyers are notified that property is in a flood area; and
- (8) Comply with the requirements of the National Flood Insurance Program for community participation as set forth in Title 44 Code of Federal Regulations, Section 59.22 so as to ensure the availability of flood insurance for residents and property owners.

(Code 1991, § 7.7-23; Code 2006, § 113-3; Ord. No. 3026, § 3, 5-11-1993)

Sec. 113-5. - General provisions.

The provisions of this chapter shall apply to all development that is wholly within or partially within any flood hazard area, including but not limited to the subdivision of land; filling, grading, and other site improvements and utility installations; construction, alteration, remodeling, enlargement, improvement, replacement, repair, relocation or demolition of buildings, structures, and facilities that are exempt from the Florida Building Code; placement, installation, or replacement of manufactured homes and manufactured buildings; installation or replacement of tanks; placement of recreational vehicles; installation of swimming pools; and any other development.

- (a) *Lands to which this chapter applies.* This chapter shall apply to all areas of the city.
- (b) *Basis for establishing the areas of special flood hazard.* The areas of special flood hazard identified by the Federal Emergency Management Agency in its flood insurance study and flood insurance rate map for the county, dated January 20, 1993, with accompanying maps and other supporting data, and any revision thereto, are adopted by reference and declared to be a part of this chapter and shall serve as the minimum basis for establishing areas of special flood hazard.
- (c) *Development permits required.* A development permit shall be required in conformance with the provision of this chapter prior to the commencement of any development and/or substantial improvement activities including buildings, structures, and facilities exempt from the Florida Building Code, which is wholly or partially within any flood hazard area.

Floodplain development permits or approval. Floodplain development permits or approvals shall be issued pursuant to this chapter for any development activities not subject to the requirements of the Florida Building Code, including buildings, structures and facilities exempt from the Florida Building Code. Depending on the nature and extent of proposed development that includes a building or structure, the Floodplain Administrator may determine that a floodplain development permit or approval is required in addition to a building permit.

Buildings, structures and facilities exempt from the Florida Building Code. Pursuant to the requirements of federal regulation for participation in the National Flood Insurance Program (44 C.F.R. Sections 59 and 60), floodplain development permits or approvals shall be required for the following buildings, structures and facilities that are exempt from the Florida Building Code and any further exemptions provided by law, which are subject to the requirements of this chapter:

- (1) Railroads and ancillary facilities associated with the railroad.
- (2) Nonresidential farm buildings on farms, as provided in section 604.50, F.S.
- (3) Temporary buildings or sheds used exclusively for construction purposes.
- (4) Mobile or modular structures used as temporary offices.
- (5) Those structures or facilities of electric utilities, as defined in section 366.02, F.S., which are directly involved in the generation, transmission, or distribution of electricity.

- (6) Chickees constructed by the Miccosukee Tribe of Indians of Florida or the Seminole Tribe of Florida. As used in this paragraph, the term "chickee" means an open-sided wooden hut that has a thatched roof of palm or palmetto or other traditional materials, and that does not incorporate any electrical, plumbing, or other non-wood features.
- (7) Family mausoleums not exceeding 250 square feet in area which are prefabricated and assembled on site or preassembled and delivered on site and have walls, roofs, and a floor constructed of granite, marble, or reinforced concrete.
- (8) Temporary housing provided by the Department of Corrections to any prisoner in the state correctional system.
- (9) Structures identified in section 553.73(10) (k), F.S., are not exempt from the Florida Building Code if such structures are located in flood hazard areas established on Flood Insurance Rate Maps.

Application for a permit or approval. To obtain a floodplain development permit or approval the applicant shall first file an application in writing on a form furnished by the community. The information provided shall:

- (1) Identify and describe the development to be covered by the permit or approval.
- (2) Describe the land on which the proposed development is to be conducted by legal description, street address or similar description that will readily identify and definitively locate the site.
- (3) Indicate the use and occupancy for which the proposed development is intended.
- (4) Be accompanied by a site plan or construction documents as specified in Section 113-6(c) of this chapter.
- (5) State the valuation of the proposed work.
- (6) Be signed by the applicant or the applicant's authorized agent.
- (7) Give such other data and information as required by the Floodplain Administrator.

Validity of permit or approval. The issuance of a floodplain development permit or approval pursuant to this chapter shall not be construed to be a permit for, or approval of, any violation of this chapter, the Florida Building Codes, or any other ordinance of this community. The issuance of permits based on submitted applications, construction documents, and information shall not prevent the Floodplain Administrator from requiring the correction of errors and omissions.

Expiration. A floodplain development permit or approval shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized is suspended or abandoned for a period of 180 days after the work commences. Extensions for periods of not more than 180 days each shall be requested in writing and justifiable cause shall be demonstrated.

Suspension or revocation. The Floodplain Administrator is authorized to suspend or revoke a floodplain development permit or approval if the permit was issued in error, on the basis of incorrect, inaccurate or incomplete information, or in violation of this chapter or any other ordinance, regulation or requirement of this community.

Other permits required. Floodplain development permits and building permits shall include a condition that all other applicable state or federal permits be obtained before commencement of the permitted development, including but not limited to the following:

- (1) The South Florida Water Management District; section 373.036, F.S.
- (2) Florida Department of Health for onsite sewage treatment and disposal systems; section 381.0065, F.S. and Chapter 64E-6, F.A.C.

(3) Florida Department of Environmental Protection for construction, reconstruction, changes, or physical activities for shore protection or other activities seaward of the coastal construction control line; section 161.141, F.S.

(4) Florida Department of Environmental Protection for activities subject to the Joint Coastal Permit; section 161.055, F.S.

(5) Florida Department of Environmental Protection for activities that affect wetlands and alter surface water flows, in conjunction with the U.S. Army Corps of Engineers; Section 404 of the Clean Water Act.

(+)(6) Federal permits and approvals.

(d) *Compliance.* No development activity shall occur without full compliance with the terms of this chapter and other applicable codes and regulations.

(e) *Submissions of additional data to establish flood hazard areas.* To establish flood hazard areas and base flood elevations, pursuant to Section 113-6(c) of this chapter the Floodplain Administrator may require submission of additional data. Where field surveyed topography prepared by a Florida licensed professional surveyor or digital topography accepted by the community indicates that ground elevations:

(1) Are below the closest applicable base flood elevation, even in areas not delineated as a special flood hazard area on a FIRM, the area shall be considered as flood hazard area and subject to the requirements of this chapter and, as applicable, the requirements of the Florida Building Code.

(2) Are above the closest applicable base flood elevation, the area shall be regulated as special flood hazard area unless the applicant obtains a Letter of Map Change that removes the area from the special flood hazard area.

(f) *Other laws.* The provisions of this chapter shall not be deemed to nullify any provisions of local, state or federal law.

(g) *Abrogation and greater restrictions.* This chapter supersedes any chapter in effect for management of development in flood hazard areas. However, it is not intended to repeal, abrogate, or impair any existing ordinances, easements, covenants, or deed restrictions but any land that is subject to such interests shall also be governed by this chapter. However, where this chapter and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

(fh) *Interpretation.* In the interpretation and application of this chapter all provisions shall be:

(1) Considered as minimum requirements;

(2) Liberally construed in favor of the governing body; and

(3) Deemed neither to limit nor repeal any other powers granted under state statutes.

(gi) *This chapter is intended to be administered and enforced in conjunction with the Florida Building Code. Where cited, ASCE 24 refers to the standard that is referenced by the Florida Building Code.*

(j) *Warning and disclaimer of liability.* The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. The flood hazard areas and base flood elevations contained in the Flood Insurance Study and shown on Flood Insurance Rate Maps and the requirements of Title 44 Code of Federal Regulations, Sections 59 and 60 may be revised by the Federal Emergency Management Agency, requiring this community to revise these regulations to remain eligible for participation in the National Flood Insurance Program. No guaranty of vested use, existing use, or future use is implied or expressed by

compliance with this chapter. This chapter shall not create liability on the part of the city or by any officer or employee thereof for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.

(hk) Violation. Any development that is not within the scope of the Florida Building Code but that is regulated by this chapter that is performed without an issued permit, that is in conflict with an issued permit, or that does not fully comply with this chapter, shall be deemed a violation of this chapter. A building or structure without the documentation of elevation of the lowest floor, other required design certifications, or other evidence of compliance required by this chapter or the Florida Building Code is presumed to be a violation until such time as that documentation is provided.

(l) Penalties for violation. Violation of the provisions of this chapter or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of a variance shall constitute an offense. For development that is not within the scope of the Florida Building Code but that is regulated by this chapter and that is determined to be a violation, the Floodplain Administrator is authorized to serve notices of violation or stop work orders to owners of the property involved, to the owner's agent, or to the person or persons performing the work. Any person who shall continue any work after having been served with a notice of violation or a stop work order, except such work as that person is directed to perform to remove or remedy a violation or unsafe condition, shall be subject to penalties as prescribed by law.

Nothing herein contained shall prevent the city from taking such other lawful actions as are necessary to prevent or remedy any violation.

(Code 1991, § 7.7-25; Code 2006, § 113-5; Ord. No. 3026, § 5, 5-11-1993)

Sec. 113-6. - Administration.

(a) Designation of local administrator. The building and zoning director or his or her designee is designated as the Floodplain Administrator and is hereby appointed to administer and implement the provisions of this chapter. The Floodplain Administrator shall have the authority to render interpretations of this chapter consistent with the intent and purpose of this chapter and may establish policies and procedures in order to clarify the application of its provisions. Such interpretations, policies, and procedures shall not have the effect of waiving requirements specifically provided in this chapter without the granting of a variance pursuant to Section 113-9 of this chapter.

(b) Permit procedures for building construction. Application for a development permit for constructing or substantially improving a structure shall be made to the building and zoning director or his or her designee on forms furnished by the building and zoning director or his or her designee's office prior to any development activities, and may include, but not be limited to, the following plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question, existing or proposed structures, earthen fill, storage of materials or equipment, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

(1) Application stage[MFS3].

- a. Elevation in relation to the FEMA 100-year flood elevation and the mean sea level of the proposed lowest floor, or the lowest surface of any heating or air conditioning duct work installed below the lowest floor, or the lowest horizontal supporting member in a coastal high hazard area (V-zone), of all proposed buildings or substantial improvements. The elevation shall be signed and sealed by a Professional Surveyor licensed in the State of Florida;
- b. Elevation in relation to the FEMA 100-year flood elevation and the mean sea level to which any proposed building or substantial improvement, not located in a coastal high hazard area (V-zone), will be floodproofed. The elevation shall be signed and sealed by a Professional Surveyor licensed in the State of Florida;

- c. A signed, sealed certificate, separate from the submitted plans, from a registered professional engineer that the floodproofed building will meet the floodproofing criteria in this chapter;
- d. A signed, sealed certificate, separate from the submitted plans, from a registered professional engineer that a new or substantially improved building located in the coastal high hazard area (V-zone) will meet the construction standards contained in section 113-7(c);
- e. A description of the extent to which any watercourse, swamp, marsh, lake, or pond will be altered, relocated, or created as result of proposed construction;
- f. A description of the type, extent, and depth of proposed fill and the elevation in relation to the FEMA 100-year flood elevation and the mean sea level of the top surface of the fill;
- g. A description of the type, extent, and depth of proposed excavation in relation to the FEMA 100-year flood elevation and the mean sea level;
- h. A plot plan, to scale, illustrating the locations of all proposed construction, fill, excavating, and other aspects of the development and a demonstration that any onsite development or fill will not block historic flow patterns or reduce storage to cause any offsite flood stage increases;
- i. A copy of the proposed stormwater management report and floodplain study, if any, complete with technical supporting data;
- j. A copy of proposed grading and drainage plans;
- k. Upon request, stormwater management plans.

l. Copies of applicable permit approvals from the USACE, SFWMD, FDEP, and/or the Miami-Dade County RER Department.

(2) *Construction stage.* Floor elevation or floodproofing certifications.

- a. Upon placement of the lowest floor, or, in the coastal high hazard areas (V-zones) upon placement of the horizontal structural members of the lowest floor, whichever is applicable, it shall be the duty of the permit holder to submit to the building and zoning director or his or her designee a certification of the elevation of the top of the lowest floor, or the lowest surface of any heating or air conditioning duct work installed below the lowest floor, or the elevation of the lowest portion of the horizontal structural members of the lowest floor, whichever is applicable, as built, in relation to mean sea level. Said certification shall be made on a FEMA Elevation Certificate Form No. 81-31, or a form containing at least the same information, and shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer.
- b. When floodproofing is utilized for a building, the permit holder shall submit to the building and zoning director or his or her designee a floodproofing certification at the time the exterior walls are completed to the required floodproofed elevation. Said certification shall be prepared by or under the direct supervision of a professional engineer and certified by same, utilizing the FEMA Floodproofing Certificate Form No. 81-65, or the equivalent.
- c. Any additional work undertaken prior to submission and approval of the certification shall be at the permit holder's risk.
- d. The building and zoning director or his or her designee shall review the floor elevation survey data or floodproofing certification submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed.
- e. Failure to submit the elevation or floodproofing certifications or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.

- f. Prior to issuance of a certificate of occupancy for new construction or substantial improvement in the coastal high hazard area (V-zones), the permit holder shall submit a signed, sealed certificate, separate from the submitted plans, from a registered professional engineer certifying that the building has been constructed in compliance with the standards contained in section 113-7(c). A certificate of occupancy will not be issued until this certification has been received and accepted by the building and zoning director or his or her designee.

(c) Site Plans and Construction Documents. The site plan or documents for any development subject to the requirements of this chapter shall be drawn to scale and shall include, as applicable to the proposed development:

- (1) Delineation of flood hazard areas, floodway boundaries and flood zone(s), base flood elevation(s), and ground elevations if necessary for review of the proposed development.
- (2) Where base flood elevations or floodway data are not included on the FIRM or in the Flood Insurance Study, they shall be established in accordance with items (2) or (3) of the next paragraph.[TDS4]
- (3) Where the parcel on which the proposed development will take place will have more than 50 lots or is larger than 5 acres and the base flood elevations are not included on the FIRM or in the Flood Insurance Study, such elevations shall be established in accordance with item (1) of the next paragraph.[TDS5]
- (4) Location of the proposed activity and proposed structures, and locations of existing buildings and structures; in coastal high hazard areas, new buildings shall be located landward of the reach of mean high tide.
- (5) Location, extent, amount, and proposed final grades of any filling, grading, or excavation.
- (6) Where the placement of fill is proposed, the amount, type, and source of fill material; compaction specifications; a description of the intended purpose of the fill areas; and evidence that the proposed fill areas are the minimum necessary to achieve the intended purpose.
- (7) Delineation of the Coastal Construction Control Line or notation that the site is seaward of the coastal construction control line, if applicable.
- (8) Extent of any proposed alteration of sand dunes or mangrove stands, provided such alteration is approved by the Florida Department of Environmental Protection.
- (9) Existing and proposed alignment of any proposed alteration of a watercourse.

Where flood hazard areas are delineated on the FIRM and base flood elevation data have not been provided, the Floodplain Administrator shall:

- (1) Require the applicant to include base flood elevation data prepared in accordance with currently accepted engineering practices.
- (2) Obtain, review, and provide to applicant's base flood elevation and floodway data available from a federal or state agency or other source or require the applicant to obtain and use base flood elevation and floodway data available from a federal or state agency or other source.
- (3) Where base flood elevation and floodway data are not available from another source, where the available data are deemed by the Floodplain Administrator to not reasonably reflect flooding conditions, or where the available data are known to be scientifically or technically incorrect or otherwise inadequate:
 - (a) Require the applicant to include base flood elevation data prepared in accordance with currently accepted engineering practices; or

(b) Specify that the base flood elevation is two (2) feet above the highest adjacent grade at the location of the development, provided there is no evidence indicating flood depths have been or may be greater than two (2) feet.

(4) Where the base flood elevation data are to be used to support a Letter of Map Change from FEMA, advise the applicant that the analyses shall be prepared by a Florida licensed engineer in a format required by FEMA, and that it shall be the responsibility of the applicant to satisfy the submittal requirements and pay the processing fees.

As applicable to the location and nature of the proposed development activity, and in addition to the requirements of this section, the applicant shall have the following analyses signed and sealed by a Florida licensed engineer for submission with the site plan and construction documents:

(1) For development activities proposed to be located in a regulatory floodway, a floodway encroachment analysis that demonstrates that the encroachment of the proposed development will not cause any increase in base flood elevations; where the applicant proposes to undertake development activities that do increase base flood elevations, the applicant shall submit such analysis to FEMA as specified in this chapter and shall submit the Conditional Letter of Map Revision, if issued by FEMA, with the site plan and construction documents.

(2) For development activities proposed to be located in a riverine flood hazard area for which base flood elevations are included in the Flood Insurance Study or on the FIRM and floodways have not been designated, hydrologic and hydraulic analyses that demonstrate that the cumulative effect of the proposed development, when combined with all other existing and anticipated flood hazard area encroachments, will not increase the base flood elevation more than one (1) foot at any point within the community. This requirement does not apply in isolated flood hazard areas not connected to a riverine flood hazard area or in flood hazard areas identified as Zone AO or Zone AH.

(3) For alteration of a watercourse, an engineering analysis prepared in accordance with standard engineering practices which demonstrates that the flood-carrying capacity of the altered or relocated portion of the watercourse will not be decreased, and certification that the altered watercourse shall be maintained in a manner which preserves the channel's flood-carrying capacity; the applicant shall submit the analysis to FEMA as specified in this chapter.

(4) For activities that propose to alter sand dunes or mangrove stands in coastal high hazard areas (Zone V), an engineering analysis that demonstrates that the proposed alteration will not increase the potential for flood damage.

When additional hydrologic, hydraulic or other engineering data, studies, and additional analyses are submitted to support an application, the applicant has the right to seek a Letter of Map Change from FEMA to change the base flood elevations, change floodway boundaries, or change boundaries of flood hazard areas shown on FIRMs, and to submit such data to FEMA for such purposes. The analyses shall be prepared by a Florida licensed engineer in a format required by FEMA. Submittal requirements and processing fees shall be the responsibility of the applicant.

(d) *Duties and responsibilities of the local administrator.* Duties of the building and zoning director or his or her designee, as the local administrator of this chapter, shall include, but not be limited to:

(1) Render interpretations of this chapter consistent with the intent and purpose of this chapter and may establish policies and procedures in order to clarify the application of its provisions. Such interpretations, policies, and procedures shall not have the effect of waiving requirements specifically provided in this chapter without the granting of a variance pursuant to this chapter.

(2) Review applications and plans to determine whether proposed new development will be located in flood hazard areas;

- (3) Review all applications for development permits to ensure that the permit requirements of this chapter have been satisfied.
- (24) Advise permittees that additional federal or state permits may be required and, if specific federal or state permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit.
- (35) Verify and record the actual elevation (in relation to mean sea level) of the lowest floor of all new or substantially improved buildings, in accordance with section 113-7(b)(1).
- (46) Verify and record the actual elevation (in relation to mean sea level) to which the new or substantially improved buildings have been elevated or floodproofed, in accordance with section 113-7(b)(2).
- (7) Interpret flood hazard area boundaries where such interpretation is necessary to determine the exact location of boundaries; a person contesting the determination shall have the opportunity to appeal the interpretation.
- (8) Determine whether additional flood hazard data shall be obtained from other sources or shall be developed by an applicant.
- (9) Review applications to determine whether proposed development will be reasonably safe from flooding.
- (10) Issue floodplain development permits or approvals for development other than buildings and structures that are subject to the Florida Building Code, including buildings, structures and facilities exempt from the Florida Building Code, when compliance with this chapter is demonstrated, or disapprove the same in the event of noncompliance.
- (11) Assure that applications, plan reviews, and inspections for buildings and structures in flood hazard areas comply with the applicable provisions of this chapter.

(512) Review proposed development to ensure that no use shall be made for other than crop, grove and nursery purposes, or similar uses, and no building of any type shall be constructed, erected, removed on any land below the elevation established by the county flood criteria map as adopted by the board of county commissioners, or the back of sidewalk elevation of the road fronting the property, or if there is no sidewalk, the elevation of the crown of the road or street abutting such building site, whichever is higher, and before any such land shall be used, except as above authorized, it shall be filled as required by the director of the departments of environmental resources management of the county and the city development services and public works departments.

For uses other than residential requiring a floor, the floor elevation shall be:

- Flood Zone X - a minimum of four inches above the elevation established by the county flood criteria map or the back of sidewalk elevation, or if there is no sidewalk, the elevation of the highest crown of road or street abutting such building site, whichever is higher, or if the road has no crown, then the highest edge of cross section of the road shall apply.
- All other Flood Zones: a minimum as established per the latest adopted edition of the Florida Building Code.

For all residential use, the floor elevation shall be

- Flood Zone X - a minimum of 16 inches above the elevation established by the county flood criteria map or the back of sidewalk elevation, or if there is no sidewalk, the

elevation of the highest crown of road or street abutting such building site, whichever is higher, or if the road has no crown, then the highest edge of cross section of the road shall apply.

- All other Flood Zones: a minimum as established per the latest adopted edition of the Florida Building Code.

~~For uses other than residential requiring a floor, the floor elevation shall be a minimum of four inches above the elevation established by the county flood criteria map, or the back of sidewalk elevation, or if there is no sidewalk, the elevation of the highest crown of road or street abutting such building site, whichever is higher, or if the road has no crown, then the highest edge of cross section of the road shall apply. f~~

~~For all residential use, the floor elevation shall be a minimum of 16 inches above the elevation established by the county flood criteria map, or the back of sidewalk elevation or if there is no sidewalk, the elevation of the highest crown of road or street abutting such building site, whichever is higher, or if the road has no crown, the highest edge of cross section of the road shall apply. (mfs6)~~

In all cases and for all uses and whether the property is located in a special flood hazard area, or outside, the floor elevation obtained as above described, shall be compared against the base flood elevation shown in the flood insurance rate maps and the higher of the two shall be used for design and construction. The provision of this subsection shall not apply to off-street parking facilities constructed underground and other similar types of below grade areas within a building which are not lowest floor and do not contain electrical, nor mechanical equipment. All such facilities constructed below grade shall be so designed and constructed and contain essential equipment, if necessary, to prevent infiltration and accumulation of water or to provide for immediate and continuous elimination of water. A state registered engineer shall submit data and a floodproofing certificate to ensure the design complies with all guideline of section 113-7(c)(9).

(613) In coastal high hazard areas, requiring permittees to provide certification from a registered professional engineer that the building is designed and securely anchored to adequately anchored pilings or columns in order to withstand velocity waters and hurricane wave wash, in compliance with section 113-7(c)(2), (3) and (4).

(714) In coastal high hazard areas, the building and zoning director or his or her designee shall review plans for adequacy of breakaway walls in accordance with section 113-7(c)(8), (9) and (10).

(815) When floodproofing is utilized for a particular building, the building and zoning director or his or her designee shall obtain certification from a registered professional engineer, in accordance with this chapter.

~~(916) _____) —~~For applications for building permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator, in coordination with the Building Official, shall:

(1) Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made;

(2) Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure;

(3) Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; and

(4) Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the *Florida Building Code* and this chapter is required.

(17) The office of the building and zoning director or his or her designee shall serve as the official map repository for FEMA flood insurance rate maps, flood boundary and floodway maps (if applicable), and flood hazard boundary maps for the community, together with letters of map amendment (LOMA) and letters of map revision (LOMR). At least one copy of all current and superseded maps, LOMA and LOMR shall be maintained for public use and viewing.

(4018) All records pertaining to the provisions of this chapter and the flood resistant construction requirements of the *Florida Building Code*, including Flood Insurance Rate Maps; Letters of Map Change; records of issuance of permits and denial of permits; determinations of whether proposed work constitutes substantial improvement or repair of substantial damage; required design certifications and documentation of elevations specified by the *Florida Building Code* and this chapter; notifications to adjacent communities, FEMA, and the state related to alterations of watercourses; assurances that the flood carrying capacity of altered watercourses will be maintained; documentation related to appeals and variances, including justification for issuance or denial; and records of enforcement actions taken pursuant to this chapter and the flood resistant construction requirements of the *Florida Building Code* shall be maintained in the office of the building and zoning director or his or her designee and shall be open for public inspection. Copies of all development permits and summary supporting documentation shall be filed by geographic area for ease of coordinating all floodplain development activities.

(19) The Floodplain Administrator shall coordinate with appropriate local agencies for the issuance of all necessary notices or orders to ensure compliance with this chapter.

(20) The Floodplain Administrator shall make the required inspections as specified below for development that is not subject to the *Florida Building Code*, including buildings, structures and facilities exempt from the *Florida Building Code*. The Floodplain Administrator shall inspect:

(a) Flood hazard areas to determine if development is undertaken without issuance of a permit;

(b) All development to determine compliance with the requirements of this chapter and the conditions of issued floodplain development permits or approvals;

(c) Buildings, structures and facilities exempt from the *Florida Building Code* to determine compliance with the requirements of this chapter and the conditions of issued floodplain development permits or approvals;

(d) Manufactured homes that are installed or replaced in flood hazard areas to determine compliance with the requirements of this chapter and the conditions of the issued permit. Upon placement of a manufactured home, certification of the elevation of the lowest floor shall be submitted to the Floodplain Administrator.

Upon placement of the lowest floor, including basement, and prior to further vertical construction, the owner of a building, structure or facility exempt from the *Florida Building Code*, or the owner's authorized agent, shall submit to the Floodplain Administrator:

(a) If a design flood elevation was used to determine the required elevation of the lowest floor, the certification of elevation of the lowest floor prepared and sealed by a Florida licensed professional surveyor; or

(b) If the elevation used to determine the required elevation of the lowest floor was determined in accordance with this chapter, the documentation of height of the lowest

floor above highest adjacent grade, prepared by the owner or the owner's authorized agent.

As part of the final inspection, the owner or owner's authorized agent shall submit to the Floodplain Administrator a final certification of elevation of the lowest floor or final documentation of the height of the lowest floor above the highest adjacent grade; such certifications and documentations shall be prepared as specified above.

(21) The Floodplain Administrator shall have other duties, including but not limited to:

(c) Establish procedures for administering and documenting determinations of substantial improvement and substantial damage made pursuant to Section 113-6(c)(16) of this chapter;

(d) Require that applicants proposing alteration of a watercourse notify adjacent communities and the Florida Division of Emergency Management, State Floodplain Management Office, and submit copies of such notifications to the FEMA;

(e) Require applicants who submit hydrologic and hydraulic engineering analyses to support permit applications to submit to FEMA the data and information necessary to maintain the Flood Insurance Rate Maps if the analyses propose to change base flood elevations, flood hazard area boundaries, or floodway designations; such submissions shall be made within 6 months of such data becoming available;

(f) Review required design certifications and documentation of elevations specified by this chapter and the *Florida Building Code* to determine that such certifications and documentations are complete;

(g) Notify FEMA when the corporate boundaries are modified; and

(h) Advise applicants for new buildings and structures, including substantial improvements that are located in any unit of the Coastal Barrier Resources System established by the Coastal Barrier Resources Act (Pub. L. 97-348) and the Coastal Barrier Improvement Act of 1990 (Pub. L. 101-591) that federal flood insurance is not available on such construction; areas subject to this limitation are identified on Flood Insurance Rate Maps as "Coastal Barrier Resource System Areas" and "Otherwise Protected Areas."

(22) The Floodplain Administrator shall review requests that seek approval to modify the strict application of the flood load and flood resistant construction requirements of the Florida Building Code to determine whether such requests require the granting of a variance pursuant to this chapter.

(23) The Floodplain Administrator is authorized to waive the submission of site plans, construction documents, and other data that are required by this chapter but that are not required to be prepared by a registered design professional if it is found that the nature of the proposed development is such that the review of such submissions is not necessary to ascertain compliance with this chapter.

(Code 1991, § 7.7-26; Code 2006, § 113-6; Ord. No. 3026, § 6, 5-11-1993)

Sec. 113-7. - Provisions for flood hazard reduction.

(a) *General standards.* In all areas of special flood hazard the following provisions are required:

- (1) New construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure;
- (2) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;

- (3) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
 - (4) Electrical, heating, ventilation, plumbing, air conditioning equipment, including duct work, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
 - (5) New and replacement water supply systems shall be designed in accordance with the water well construction standards in Chapter 62-532.500, FAC and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwaters into the system;
 - (6) All New and replacement sanitary sewage systems, private treatment plants (including all pumping stations and collector systems), and on-site waste disposal systems shall be designed in accordance with the standards for onsite sewage treatment and disposal systems in Chapter 64E-6, FAC and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters, and impairment of the systems;
 - (7) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;
 - (8) Any alteration, repair, reconstruction or improvement to a building which is in compliance with the provisions of this chapter, shall meet the requirements of new construction as contained in this chapter;
 - (9) Adequate drainage paths shall be provided around structures to guide stormwater runoff away from them and will not block historic flow patterns or reduce storage to cause any offsite flood stage increases;
 - (10) Any improvements made to new or substantially improved buildings for which permits were issued on or after December 31, 1974, shall conform to the requirements for new construction under this chapter;
 - (11) Functionally dependent structures and any improvements to historic buildings may be exempted from one or all of the standards contained in this chapter, provided the request for an exemption is approved as a variance, as provided in this chapter and, with regard to historic buildings, the proposed improvements are certified by a certified local government or the state historic preservation officer as maintaining the historical integrity and classification of the building.
- (b) *Specific standards for A-zone flood hazard areas.* In all areas of special flood hazard, areas denoted with an "A" prefix on the FIRM where base flood elevation data have been provided, as set forth in this subsection, the following provisions are required, in addition to the general standards of subsection (a) of this section.
- (1) *Residential construction.* New construction or substantial improvement of any residential building shall have the lowest floor, together with all mechanical and electrical equipment, including duct work, and including any basement, elevated no lower than the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of subsection (b)(3) of this section. The floor of an attached garage may be placed below the base flood elevation, provided the openings required in subsection (b)(3) of this section are installed and all mechanical and electrical equipment, including laundry facilities and food freezers, are elevated above the base flood elevation.
 - (2) *Nonresidential construction.* New construction or substantial improvement of any commercial, industrial, or nonresidential building shall have the lowest floor, together with all mechanical and electrical equipment, including duct work, and including any basement, elevated no lower than the base flood elevation. The floor of an attached garage or loading dock may be placed below the base flood elevation, provided the openings required in subsection (b)(3) of this section are installed and all mechanical and electrical equipment are elevated above the base flood elevation. Buildings may be floodproofed to an elevation one foot above the required base flood

elevation noted above, in lieu of being elevated, provided that all areas of the building below the required elevation are watertight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the official as set forth in subsection (c)(5) of this section.

- (3) *Elevated buildings.* New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by the foundation and other exterior walls below the base flood elevation shall be designed to preclude finished living space and shall be designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.
 - a. Designs for complying with this requirement must be either certified by a professional engineer or meet the following minimum criteria:
 1. Provide a minimum of two openings (in walls or doors) having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 2. The bottom of all openings shall be no higher than one foot above grade; and
 3. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
 - b. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator);
 - c. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms;
 - d. Use of such enclosed areas shall be limited to parking, storage, and building access.
- (4) *Accessory structures.* Accessory structures may be exempted from the elevation requirement of subsection (b) of this section, provided the following criteria are met:
 - a. The structure is not used for human habitation, including occupancy as a work place for extended periods of time;
 - b. The structure is designed and constructed so as to have a low potential for damage during a flood (e.g., using flood resistant materials as provided in FEMA Technical Bulletin #88-2, and any subsequent revisions thereto);
 - c. The structure shall be located so as to offer the minimum resistance to the flow of floodwaters (e.g., parallel to a stream, perpendicular to the ocean);
 - d. The structure is firmly anchored to prevent flotation, per subsection (a)(1) of this section;
 - e. All electrical service, heating/cooling equipment, and other mechanical or electrical equipment is either elevated above the base flood elevation, or is floodproofed. One ground-fault interrupt circuit may be installed below the base flood elevation, and all construction below that elevation shall be of flood-resistant materials.
- (5) *Temporary structures.*
 - a. Certain types of structures (e.g., construction trailers, construction site offices) may be located temporarily on property without having to comply with the general standards of subsection (a) of this section, or the elevation standard of subsection (b) of this section, provided the following criteria are met:
 1. The structure is mobile, or can be made so, and is capable of being removed from the site with a minimum of 36 hours' warning.

2. The structure does not have an approval to remain on the property for more than 180 days.
 3. The applicant submits a plan for the removal of the structure, containing the following documentation:
 - (i) The name, address, phone number and emergency contact point of the individual responsible for the removal of the structure.
 - (ii) The time at which the structure will be removed (i.e., a minimum of 72 hours in advance of the projected landfall of a hurricane).
 - (iii) A copy of a contract or other suitable instrument with a trucking company to ensure the availability of removal of the structure when needed, together with the name, address, and emergency phone number of the responsible trucking company agent.
 - (iv) Designation, accompanied by documentation (e.g., signed consent of the property owner), of a site outside the city to which the structure will be moved.
 - (v) Signatures of the applicant, property owner on which the structure will be placed, and owner of the structure, agreeing to abide by the terms of the removal plan.
- b. A temporary development permit shall be issued when a temporary structure is approved, and the expiration date shall be clearly marked on the face of the permit. The original copy of the removal plan shall be attached to the permit, and the documentation shall be kept on file in the building and zoning director or his or her designee's office. A copy of the permit, together with the removal plan, shall be provided by the owner to the local emergency management coordinator.
- (c) *Standards for coastal high hazard areas (V-zones)*. Located within the areas of special flood hazard are areas designated as coastal high hazard areas, which are denoted with a "V" prefix on the FIRM. These areas, called "velocity zones," have special flood hazards associated with wave action, therefore, the following provisions shall apply:
- (1) *Building location*. All building shall be located in conformance with the requirements of the state Coastal Zone Protection Act of 1985 (F.S. § 161.52 et seq.).
 - (2) *Elevated buildings*. All buildings shall be elevated so that the bottom of the lowest supporting horizontal member (excluding pilings or columns), together with all mechanical and electrical equipment, including duct work, is located no lower than the base flood elevation, with all space below the lowest supporting member open so as not to impede the flow of water. Open lattice work or decorative screening may be permitted for aesthetic purposes only and must be designed to wash away in the event of abnormal wave action and in accordance with subsection (c)(8) of this section.
 - (3) *Piling or column foundations*. All buildings or structures shall be securely anchored on pilings or columns extending vertically below grade a sufficient depth below the zone of potential scour and securely anchored to subsoil strata.
 - (4) *Anchoring and connection requirements*. All pile and column foundations and structures attached thereto shall be anchored to resist flotation, collapse, and lateral movement due to the effect of wind and water loads acting simultaneously on all building components. Proper structural anchoring shall include a complete system of adequately-sized, galvanized metal connectors securely fastening the various structural subsystems of the building together, from the roofing and ridge down to the pilings, to resist wind damage. Water loading values shall equal or exceed the base flood. Wind loading values shall be in accordance with the state building code, and any subsequent revisions thereto.
 - (5) *Certification of design*. At time of application for a permit, a registered professional engineer shall certify that the design, specifications and plans for construction are in compliance with the provisions contained in subsections (c)(2), (3) and (4) of this section, and shall cite the

parameters and variables used in development the design, including wind loading values, water loading values, depth of potential scour zone, and subsoil strata characteristics.

- (6) *Ban on use of structural fill.* There shall be no fill used as structural support. Limited noncompacted fill may be used around the perimeter of a building for landscaping/aesthetic purposes, provided the fill will wash out from storm surge, (thereby rendering the building free of obstruction) prior to generating excessive loading forces, ramping effects or wave deflection. The building and zoning director or his or her designee shall approve design plans for landscaping/aesthetic fill only after the applicant has provided an analysis by a soil scientist, which demonstrates that the following factors have been fully considered:
 - a. Particle composition of fill material does not have a tendency for excessive natural compaction;
 - b. Volume and distribution of fill will not cause wave deflection to adjacent properties; and
 - c. Slope of fill will not cause wave run-up or ramping.
 - d. Fill does not cause a net loss of 100-year floodplain storage. Compensatory storage of equal volume must be provided onsite.
- (7) *Protection of sand dunes and mangrove stands.* There shall be no alteration of sand dunes or mangrove stands which would increase potential flood damage.
- (8) *Enclosures below base flood elevation.* Lattice work or decorative screening shall be allowed below the base flood elevation, provided they are not part of the structural support of the building and are designed so as to breakaway, under abnormally high tides or wave action, without damage to the structural integrity of the building on which they are to be used. Solid, non-supporting, breakaway walls may also be used, but only for purposes of enclosing and securing access to upper floors (foyer for staircase or elevator) and for secured storage and vehicle parking. The solid breakaway walls shall have a design safe loading resistance of not less than ten and no more than 20 pounds per square foot (either by design or as required by the state building code) may be permitted only if a registered professional engineer certifies that the designs proposed meet the following conditions:
 - a. Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and
 - b. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by state building code.
- (9) *Use of enclosed areas.* If aesthetic lattice work or screening is utilized, such enclosed space shall not be designed to be used for human habitation, but shall be designed to be used only for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Areas enclosed by solid, breakaway walls shall be used for building access parking and secured storage only.
- (10) *Plans for enclosures.* Prior to construction, plans for any buildings that will have lattice work or decorative screening, or solid, breakaway walls must be submitted to the building and zoning director or his or her designee for approval, and must comply with the standard noted in subsection (c)(8) of this section. Certification by a registered engineer is required for any breakaway wall designs which do not comply with said standard. Such designs must be certified to collapse as a result of a water load less than that which would occur during the base flood, and to not result in the displacement, collapse, or other structural damage to the rest of the building and foundation system or to adjoining structures. Water and wind loading values shall be those set forth in subsection (c)(4) of this section.

- (11) *Restriction on future enclosures.* Any alteration, repair, reconstruction or improvement to a structure shall not enclose the space below the lowest floor except as provided for in subsections (c)(8) and (9) of this section.
- (12) *Recreational vehicles.* No recreational vehicles may be placed in coastal high hazard areas.
- (13) *Certification of completed construction.* Upon completion of the structure or substantial improvement, a registered professional engineer or architect shall certify that the building was constructed in compliance with the provisions contained in subsection (c) of this section, including the approved, certified design specifications provided per subsection (c)(5) of this section.
- (14) *Accessory structures.* Accessory structures shall be allowed per subsection (b)(4) of this section, subject to the following criteria:
 - a. The structure is located so as not to cause collapse, displacement, or other structural damage to adjacent primary structures during a base flood event;
 - b. The structure is designed to not provide resistance to the combined effects of wave action and wind during a base flood event, and to break down into small enough pieces so that the resultant debris does not create a serious danger to adjacent primary structures (the safe design loading of the walls shall be not less than ten and no more than 20 pounds per square foot or as required by the state building code, whichever is stricter); and
 - c. The design of the building is certified by a registered professional engineer to comply with said standards.
- (15) *Temporary structures.* Temporary structures shall be permitted per subsection (b)(5) of this section.

(Code 1991, § 7.7-27; Code 2006, § 113-7; Ord. No. 3026, § 7, 5-11-1993)

Sec. 113-8. - Standards for subdivision and new development proposals.

(a) Buildings and structures. Pursuant to Section 113-5(c) of this chapter, buildings, structures, and facilities that are exempt from the Florida Building Code, including substantial improvement or repair of substantial damage of such buildings, structures and facilities, shall be designed and constructed in accordance with the flood load and flood resistant construction requirements of ASCE 24. Structures exempt from the Florida Building Code that are not walled and roofed buildings shall comply with the requirements of Section 113-8(j) of this chapter.

If extending, in whole or in part, seaward of the coastal construction control line and also located, in whole or in part, in a flood hazard area:

(1) Buildings and structures shall be designed and constructed to comply with the more restrictive applicable requirements of the Florida Building Code, Building Section 3109 and Section 1612 or Florida Building Code, Residential Section R322.

(2) Minor structures and non-habitable major structures as defined in section 161.54, F.S., shall be designed and constructed to comply with the intent and applicable provisions of this chapter and ASCE 24.

(b) Minimum requirements. Subdivision and new development proposals, including proposals for manufactured home parks and subdivisions, shall be reviewed to determine that:

(a1) All subdivision and new development proposals shall be consistent with the need to minimize flood damage and will be reasonably safe from flooding.

- (b2) All subdivision and new development proposals shall have public utilities and facilities such as sewer, gas, electrical, communications and water systems located and constructed to minimize or eliminate flood damage.
- (e3) All subdivision and new development proposals shall have adequate drainage provided to reduce exposure to flood hazards; in Zones AH and AO, adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures.
- (dc) Subdivision plats. Where any portion of proposed subdivisions including manufactured home parks and subdivisions, lies within a flood hazard area, the following shall be required:
- (1) Delineation of flood hazard areas, floodway boundaries and flood zones, and design flood elevations, as appropriate, shall be shown on preliminary plats;
 - (2) Base flood elevation and flood hazard area mapping shall be provided in accordance with this chapter for subdivision proposals and other proposed development which is greater than the lesser of 50 lots or five acres;
 - (3) The base flood boundary, floodway and/or V-zone boundary if applicable, and the applicable base flood elevation for the building site on each lot, shall be clearly marked on all recorded subdivision plats, be they for residential, commercial, or industrial use; and
 - (4) Compliance with the site improvement and utilities requirements of Section 113-8(d) of this chapter.
- (d) Limitations on sites in regulatory floodways. No development, including but not limited to site improvements, and land disturbing activity involving fill or regrading, shall be authorized in the regulatory floodway unless the floodway encroachment analysis required in this chapter demonstrates that the proposed development or land disturbing activity will not result in any increase in the base flood elevation.
- (e) Limitations on placement of fill. Subject to the limitations of this chapter, fill shall be designed to be stable under conditions of flooding including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and protection against flood-related erosion and scour. In addition to these requirements, if intended to support buildings and structures (Zone A only), fill shall comply with the requirements of the Florida Building Code.
- (f) Limitations on sites in coastal high hazard areas (Zone V). In coastal high hazard areas, alteration of sand dunes and mangrove stands shall be permitted only if such alteration is approved by the Florida Department of Environmental Protection and only if the engineering analysis required by this chapter demonstrates that the proposed alteration will not increase the potential for flood damage. Construction or restoration of dunes under or around elevated buildings and structures shall comply with Section 113-8(j)(7)(c) of this chapter.
- (g) Manufactured homes. All manufactured homes installed in flood hazard areas shall be installed by an installer that is licensed pursuant to section 320.8249, F.S., and shall comply with the requirements of Chapter 15C-1, F.A.C. and the requirements of this chapter. If located seaward of the coastal construction control line, all manufactured homes shall comply with the more restrictive of the applicable requirements.
- (1) Foundations. All new manufactured homes and replacement manufactured homes installed in flood hazard areas shall be installed on permanent, reinforced foundations that:
 - a. In flood hazard areas (Zone A) other than coastal high hazard areas, are designed in accordance with the foundation requirements of the Florida Building Code, Residential Section R322.2 and this chapter. Foundations for manufactured homes subject to Section 113-8(g)(5) of this chapter are permitted to be reinforced piers or other foundation elements of at least equivalent strength.

b. In coastal high hazard areas (Zone V), are designed in accordance with the foundation requirements of the Florida Building Code, Residential Section R322.3 and this chapter.

(2) Anchoring. All new manufactured homes and replacement manufactured homes shall be installed using methods and practices which minimize flood damage and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse or lateral movement. Methods of anchoring include, but are not limited to, use of over-the-top or frame ties to ground anchors. This anchoring requirement is in addition to applicable state and local anchoring requirements for wind resistance.

(3) Elevation. Manufactured homes that are placed, replaced, or substantially improved shall comply with Section 113-8(g)(4) or 113-8(g)(5) of this chapter, as applicable.

(4) General elevation requirement. Unless subject to the requirements of Section 113-8(g)(5) of this chapter, all manufactured homes that are placed, replaced, or substantially improved on sites located: (a) outside of a manufactured home park or subdivision; (b) in a new manufactured home park or subdivision; (c) in an expansion to an existing manufactured home park or subdivision; or (d) in an existing manufactured home park or subdivision upon which a manufactured home has incurred "substantial damage" as the result of a flood, shall be elevated such that the bottom of the frame is at or above the elevation required, as applicable to the flood hazard area, in the Florida Building Code, Residential Section R322.2 (Zone A) or Section R322.3 (Zone V).

(5) Elevation requirement for certain existing manufactured home parks and subdivisions. Manufactured homes that are not subject to Section 113-8(g)(4) of this chapter, including manufactured homes that are placed, replaced, or substantially improved on sites located in an existing manufactured home park or subdivision, unless on a site where substantial damage as result of flooding has occurred, shall be elevated such that either the:

(1) Bottom of the frame of the manufactured home is at or above the elevation required, as applicable to the flood hazard area, in the Florida Building Code, Residential Section R322.2 (Zone A) or Section R322.3 (Zone V); or

(2) Bottom of the frame is supported by reinforced piers or other foundation elements of at least equivalent strength that are not less than 36 inches in height above grade.

(6) Enclosures. Enclosed areas below elevated manufactured homes shall comply with the requirements of the Florida Building Code, Residential Section R322.2 or R322.3 for such enclosed areas, as applicable to the flood hazard area.

(7) Utility equipment. Utility equipment that serves manufactured homes, including electric, heating, ventilation, plumbing, and air conditioning equipment and other service facilities, shall comply with the requirements of the Florida Building Code, Residential Section R322, as applicable to the flood hazard area.

(h) Recreational vehicles and park trailers

(1) Temporary placement. Recreational vehicles and park trailers placed temporarily in flood hazard areas shall:

(a) Be on the site for fewer than 180 consecutive days; or

(b) Be fully licensed and ready for highway use, which means the recreational vehicle or park

model is on wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanent attachments such as additions, rooms, stairs, decks and porches.

(2) Permanent placement. Recreational vehicles and park trailers that do not meet the limitations in Section 113-8(h)(1) of this chapter for temporary placement shall meet the requirements of Section 113-8(g) of this chapter for manufactured homes.

(i) Tanks

(1) Underground tanks. Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty.

(2) Above-ground tanks, not elevated. Above-ground tanks that do not meet the elevation requirements of Section 306.3 of this chapter shall:

(a) Be permitted in flood hazard areas (Zone A) other than coastal high hazard areas, provided the tanks are anchored or otherwise designed and constructed to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty and the effects of flood-borne debris.

(b) Not be permitted in coastal high hazard areas (Zone V).

(3) Above-ground tanks, elevated. Above-ground tanks in flood hazard areas shall be elevated to or above the design flood elevation and attached to a supporting structure that is designed to prevent flotation, collapse or lateral movement during conditions of the design flood. Tank-supporting structures shall meet the foundation requirements of the applicable flood hazard area.

(4) Tank inlets and vents. Tank inlets, fill openings, outlets and vents shall be:

(a) At or above the design flood elevation or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tanks during conditions of the design flood; and

(b) Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.

(j) Other Development. All development, including man-made changes to improved or unimproved real estate for which specific provisions are not specified in this chapter or the *Florida Building Code*, shall:

- Be located and constructed to minimize flood damage;
- Meet the limitations of Section 113-8(d) of this chapter if located in a regulated floodway;
- Be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of the design flood;
- Be constructed of flood damage-resistant materials; and
- Have mechanical, plumbing, and electrical systems above the design flood elevation or meet the requirements of ASCE 24, except that minimum electric service required to address life safety and electric code requirements is permitted below the design flood elevation provided it conforms to the provisions of the electrical part of building code for wet locations.

(1) Fences in regulated floodways. Fences in regulated floodways that have the potential to block the

passage of floodwaters, such as stockade fences and wire mesh fences, shall meet the limitations of Section 113-8(d) of this chapter.

(2) Retaining walls, sidewalks and driveways in regulated floodways. Retaining walls and sidewalks and driveways that involve the placement of fill in regulated floodways shall meet the limitations of Section 113-8(d) of this chapter.

(3) Roads and watercourse crossings in regulated floodways. Roads and watercourse crossings, including roads, bridges, culverts, low-water crossings and similar means for vehicles or pedestrians to travel from one side of a watercourse to the other side, that encroach into regulated floodways shall meet the limitations of Section 113-8(d) of this chapter. Alteration of a watercourse that is part of a road or watercourse crossing shall meet the requirements of Section 113-6(c) of this chapter.

(4) Concrete slabs used as parking pads, enclosure floors, landings, decks, walkways, patios and similar nonstructural uses in coastal high hazard areas (Zone V). In coastal high hazard areas, concrete slabs used as parking pads, enclosure floors, landings, decks, walkways, patios and similar nonstructural uses are permitted beneath or adjacent to buildings and structures provided the concrete slabs are designed and constructed to be:

- (a) Structurally independent of the foundation system of the building or structure;
- (b) Frangible and not reinforced, so as to minimize debris during flooding that is capable of causing significant damage to any structure; and
- (c) Have a maximum slab thickness of not more than four (4) inches.

(5) Decks and patios in coastal high hazard areas (Zone V). In addition to the requirements of the Florida Building Code, in coastal high hazard areas decks and patios shall be located, designed, and constructed in compliance with the following:

- (a) A deck that is structurally attached to a building or structure shall have the bottom of the lowest horizontal structural member at or above the design flood elevation and any supporting members that extend below the design flood elevation shall comply with the foundation requirements that apply to the building or structure, which shall be designed to accommodate any increased loads resulting from the attached deck.
- (b) A deck or patio that is located below the design flood elevation shall be structurally independent from buildings or structures and their foundation systems, and shall be designed and constructed either to remain intact and in place during design flood conditions or to break apart into small pieces to minimize debris during flooding that is capable of causing structural damage to the building or structure or to adjacent buildings and structures.
- (c) A deck or patio that has a vertical thickness of more than twelve (12) inches or that is constructed with more than the minimum amount of fill necessary for site drainage shall not be approved unless an analysis prepared by a qualified registered design professional demonstrates no harmful diversion of floodwaters or wave runup and wave reflection that would increase damage to the building or structure or to adjacent buildings and structures.
- (d) A deck or patio that has a vertical thickness of twelve (12) inches or less and that is at natural grade or on nonstructural fill material that is similar to and compatible with local soils and is the minimum amount necessary for site drainage may be approved without requiring analysis of the impact on diversion of floodwaters or wave runup and wave reflection.

(6) Other development in coastal high hazard areas (Zone V). In coastal high hazard areas, development activities other than buildings and structures shall be permitted only if also authorized by the appropriate federal, state or local authority; if located outside the footprint of, and not structurally

attached to, buildings and structures; and if analyses prepared by qualified registered design professionals demonstrate no harmful diversion of floodwaters or wave runup and wave reflection that would increase damage to adjacent buildings and structures. Such other development activities include but are not limited to:

- (a) Bulkheads, seawalls, retaining walls, revetments, and similar erosion control structures;
- (b) Solid fences and privacy walls, and fences prone to trapping debris, unless designed and constructed to fail under flood conditions less than the design flood or otherwise function to avoid obstruction of floodwaters; and
- (c) On-site sewage treatment and disposal systems defined in 64E-6.002, F.A.C., as filled systems or mound systems.

(7) Nonstructural fill in coastal high hazard areas (Zone V). In coastal high hazard areas:

- (a) Minor grading and the placement of minor quantities of nonstructural fill shall be permitted for landscaping and for drainage purposes under and around buildings.
- (b) Nonstructural fill with finished slopes that are steeper than one unit vertical to five units horizontal shall be permitted only if an analysis prepared by a qualified registered design professional demonstrates no harmful diversion of floodwaters or wave runup and wave reflection that would increase damage to adjacent buildings and structures.
- (c) Where authorized by the Florida Department of Environmental Protection or applicable local approval, sand dune construction and restoration of sand dunes under or around elevated buildings are permitted without additional engineering analysis or certification of the diversion of floodwater or wave runup and wave reflection if the scale and location of the dune work is consistent with local beach-dune morphology and the vertical clearance is maintained between the top of the sand dune and the lowest horizontal structural member of the building.

~~The base flood boundary, floodway and/or V-zone boundary if applicable, and the applicable base flood elevation for the building site on each lot, shall be clearly marked on all recorded subdivision plats, be they for residential, commercial, or industrial use.~~

(Code 1991, § 7.7-28; Code 2006, § 113-8; Ord. No. 3026, § 8, 5-11-1993)

Sec. 113-9. - Variances.

Pursuant to section 553.73(5), F.S., the **Building Official** shall hear and decide on requests for appeals and requests for variances to this Ordinance that are more stringent than the requirements of the Florida Building code and FEMA and as further described below.

- ~~(a) The City Commission, through the recommendation of the historical preservation board, shall hear and decide requests for variances from the requirements of this chapter. Pursuant to section 553.73(5), F.S., the City Commission shall hear and decide on requests for appeals and requests for variances from the strict application of the flood resistant construction requirements of the Florida Building Code. This section does not apply to Section 3109 of the Florida Building Code, Building.~~
- (b) The City Commission Building Official shall base its decisions on variances on technical justifications submitted by applicants, the considerations for issuance in Section 113-9(e) of this chapter, the conditions of issuance set forth in Section 113-9(f) of this chapter, and the comments and recommendations of the Floodplain Administrator. and the Building Official. The City Commission Building Official has the right to attach such conditions as it/he/she deems necessary to further the purposes and objectives of this chapter.

(c) Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed in, or eligible for listing in, the city register of historic places, either individually or as a "contributing" structure within a locally designated historic district; or for a new structure or addition to be constructed within a locally designated historic district when that design must relate to the context established by the existing structures within that district; or listed in or eligible for listing in the National Register of Historic Places either individually, or as a "contributing" structure within a National Register Historic District; or for a new structure or addition to be constructed within a National Register Historic District when that design must relate to the context established by the existing structures within that district. This provision shall be null and void should any proposed reconstruction, rehabilitation, or restoration result in the revocation of the historic designation. The variance granted will be the minimum to preserve or maintain the historic character and design of the structure or district.

(d) A variance shall not be issued for any proposed development in a floodway if any increase in base flood elevations would result, as evidenced by the applicable analyses and certifications required in Section 113-6(c) of this chapter.

(e) A variance is authorized to be issued for the construction or substantial improvement necessary for the conduct of a functionally dependent use, as defined in this chapter, provided the variance meets the requirements of Section 113-9(d), is the minimum necessary considering the flood hazard, and all due consideration has been given to use of methods and materials that minimize flood damage during occurrence of the base flood.

(f) In reviewing requests for variances, the ~~City Commission~~ Building Official shall consider all technical evaluations, all relevant factors, all other applicable provisions of the *Florida Building Code*, this chapter, and the following:

(1) The danger that materials and debris may be swept onto other lands resulting in further injury or damage;

(2) The danger to life and property due to flooding or erosion damage;

(3) The susceptibility of the proposed development, including contents, to flood damage and the effect of such damage on current and future owners;

(4) The importance of the services provided by the proposed development to the community;

(5) The availability of alternate locations for the proposed development that are subject to lower risk of flooding or erosion;

(6) The compatibility of the proposed development with existing and anticipated development;

(7) The relationship of the proposed development to the comprehensive plan and floodplain management program for the area;

(8) The safety of access to the property in times of flooding for ordinary and emergency vehicles;

(9) The expected heights, velocity, duration, rate of rise and debris and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and

(10) The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, streets and bridges.

(g) Variances shall be issued only upon:

(1) Submission by the applicant, of a showing of good and sufficient cause that the unique characteristics of the size, configuration, or topography of the site limit compliance with any provision of this chapter or the required elevation standards;

(2) Determination by the ~~City Commission~~ Building Official that:

- (a) Failure to grant the variance would result in exceptional hardship due to the physical characteristics of the land that render the lot undevelopable; increased costs to satisfy the requirements or inconvenience do not constitute hardship;
 - (b) The granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, nor create nuisances, cause fraud on or victimization of the public or conflict with existing local laws and ordinances; and
 - (c) The variance is the minimum necessary, considering the flood hazard, to afford relief;
- (3) Receipt of a signed statement by the applicant that the variance, if granted, shall be recorded in the Office of the Clerk of the Court in such a manner that it appears in the chain of title of the affected parcel of land; and
- (4) If the request is for a variance to allow construction of the lowest floor of a new building, or substantial improvement of a building, below the required elevation, a copy in the record of a written notice from the Floodplain Administrator to the applicant for the variance, specifying the difference between the base flood elevation and the proposed elevation of the lowest floor, stating that the cost of federal flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation (up to amounts as high as \$25 for \$100 of insurance coverage), and stating that construction below the base flood elevation increases risks to life and property.

(Code 1991, § 7.7-29; Code 2006, § 113-9; Ord. No. 3026, § 9, 5-11-1993; Ord. No. 3045, § 1, 10-12-1993; Ord. No. 3114, § 1, 1-10-1995; Ord. No. 2007-07, § 1, 2-27-2007)

Sec. 113-10. - Appeals.

The City Commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Building Official and Floodplain Administrator in the administration and enforcement of this chapter. Any person aggrieved by the decision may appeal such decision to the Circuit Court, as provided by Florida Statutes. The City Clerk shall maintain the records of all appeal actions under this article.

(Code 1991, § 7.7-30; Code 2006, § 113-10; Ord. No. 3026, § 10, 5-11-1993)